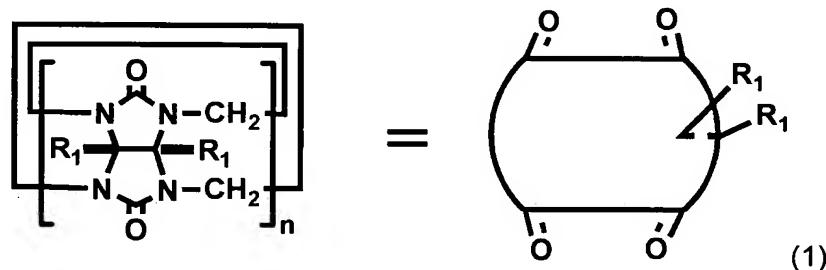


**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

What is claimed is:

1. (Original) A polymer in which a particle-type polymer with a reactive end-substituted group is linked to a cucurbituril derivative of Formula 1 below by a covalent bond:

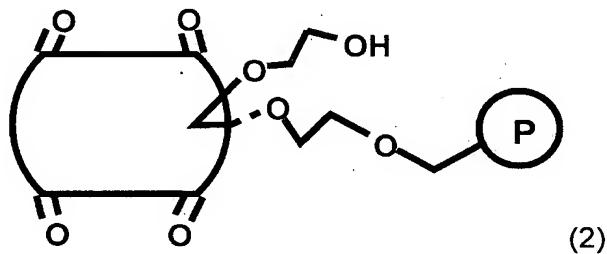


wherein n is an integer of 4 to 20, and each R<sub>1</sub> is independently a substituted or unsubstituted alkenyloxy group of C<sub>2</sub>-C<sub>20</sub> with an unsaturated bond end, a carboxyalkylsulfanyloxy group with a substituted or unsubstituted alkyl moiety of C<sub>2</sub>-C<sub>20</sub>, a carboxyalkyloxy group with a substituted or unsubstituted alkyl moiety of C<sub>2</sub>-C<sub>8</sub>, an aminoalkyloxy group with a substituted or unsubstituted alkyl moiety of C<sub>1</sub>-C<sub>8</sub>, a hydroxyalkyloxy group with a substituted or unsubstituted alkyl moiety of C<sub>1</sub>-C<sub>8</sub>, or an epoxyalkyloxy group with a substituted or unsubstituted alkyl moiety of C<sub>2</sub>-C<sub>8</sub>.

2. (Original) The polymer of claim 1, wherein the reactive end-substituted group is a halogen atom, a substituted or unsubstituted amino group, an epoxy group, a carboxyl group, a thiol group, an isocyanate group, or a thioisocyanate group.
3. (Original) The polymer of claim 1, wherein the particle-type polymer with the

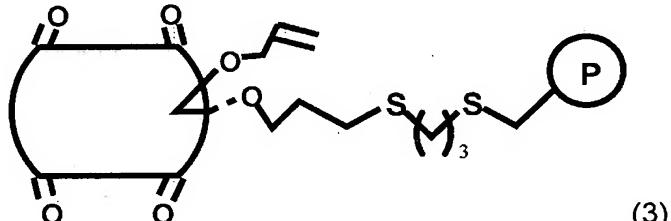
reactive end-substituted group is a Merrifield polymer or an XAD polymer.

4. (Original) The polymer of claim 1, wherein the particle-type polymer has an average particle size of 5-300  $\mu\text{m}$ .
5. (Original) The polymer of claim 1, wherein the covalent bond is an ether bond, a sulfonyl bond, an amino bond, an ester bond, an amide bond, a thioamide bond, or a urea bond.
6. (Original) The polymer of claim 1, which is a compound of Formula 2 below:



wherein P is a polymer residue.

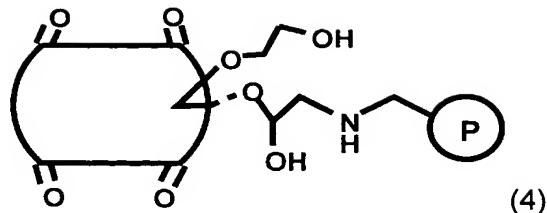
7. (Original) The polymer of claim 1, which is a compound of Formula 3 below:



wherein P is a polymer residue.

8. (Original) The polymer of claim 1, which is a compound of Formula 4

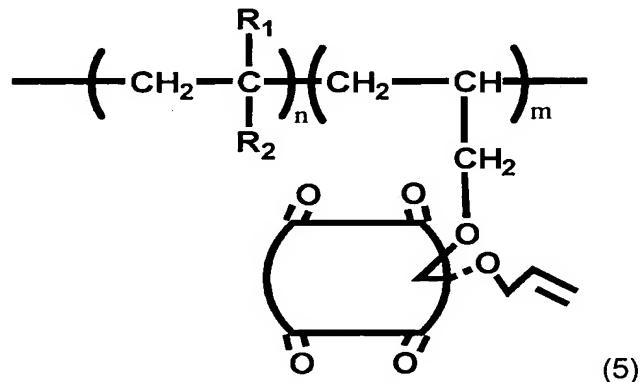
below:



wherein P is a polymer residue.

9. (Original) A polymer in which the cucurbituril derivative of Formula 1 of claim 1 is copolymerized with a monomer with a substituted or unsubstituted alkenyl group of C<sub>3</sub>-C<sub>20</sub>.

10. (Original) The polymer of claim 9, which is a compound of Formula 5 below:

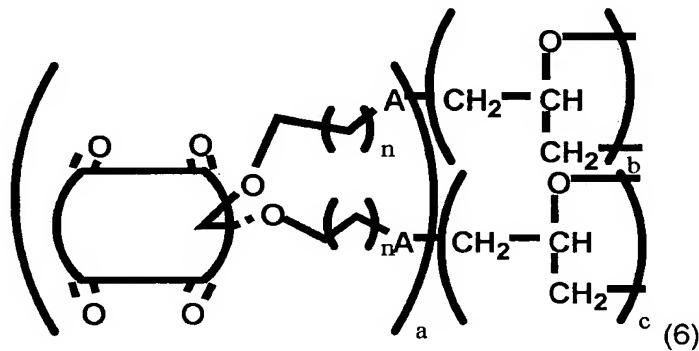


wherein n is an integer of 100-10,000, m is an integer of 10-5,000, R<sub>1</sub> and R<sub>2</sub> are each independently a substituted or unsubstituted aryl group of C<sub>6</sub>-C<sub>30</sub>, a carboxyl group, a substituted or unsubstituted heterocycle group of C<sub>4</sub>-C<sub>30</sub>, a substituted or unsubstituted alkyl group of C<sub>1</sub>-C<sub>20</sub>, a halogen atom, a cyano group, an amino group, a substituted or unsubstituted aminoalkyl group of C<sub>1</sub>-

C<sub>10</sub>, a hydroxyl group, a substituted or unsubstituted hydroxyalkyl group of C<sub>1</sub>-C<sub>10</sub>, a substituted or unsubstituted alkenyl group of C<sub>3</sub>-C<sub>10</sub>, or hydrogen.

11. (Original) The polymer of claim 10, wherein the cucurbituril derivative of Formula 1 of claim 1 where R<sub>1</sub> is an allyloxy group is copolymerized with the monomer with a substituted or unsubstituted alkenyl group of C<sub>3</sub>-C<sub>20</sub>.

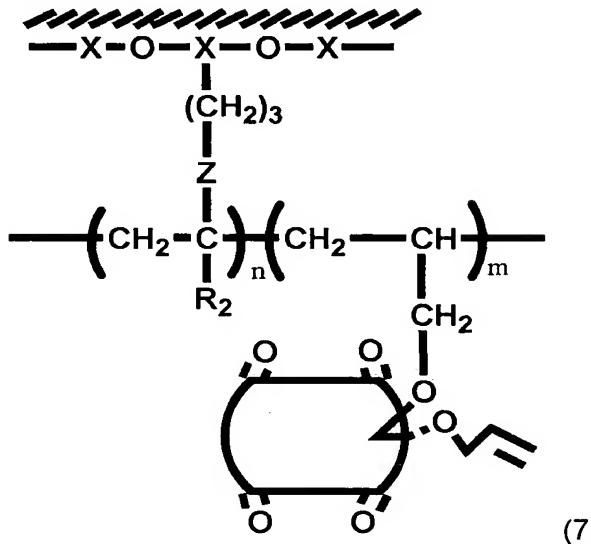
12. (Original) The polymer of claim 9, which is a compound of Formula 6 below:



wherein A is NH or O, n is an integer of 1-8, and a is an integer of 10-2,000, b and c are each independently an integer of 100-10,000.

13. (Original) The polymer of claim 12, wherein the cucurbituril derivative of Formula 1 of claim 1 where R<sub>1</sub> is an aminoalkyloxy group or a hydroxyalkyloxy group with an alkyl moiety of C<sub>2</sub>-C<sub>9</sub> is copolymerized with epichlorohydrin or epibromohydrin in the presence of a base.

14. (Original) A polymer of Formula 7 below:



wherein n is an integer of 100-10,000, m is an integer of 10-5,000, Z is an amide bond, an ester bond, a urea bond, a thiourea bond, an amine bond, or an ether bond, R<sub>2</sub> is a substituted or unsubstituted alkyl group of C<sub>1</sub>-C<sub>10</sub>, a substituted or unsubstituted aryl group of C<sub>6</sub>-C<sub>30</sub>, a carboxyl group, a substituted or unsubstituted heterocycle group of C<sub>4</sub>-C<sub>30</sub>, or hydrogen, and X is Si, Al, or Ti.

15. (Currently Amended) A filter material in which comprising the polymer of Formula 7 of claim 14 is covalently bonded to a glass wool, a filter, or a cellulose.

16. (Original) A monolithic column obtained by a process comprising:  
dissolving a monomer with a substituted or unsubstituted alkenyl group of C<sub>3</sub>-C<sub>20</sub> and allyloxycucurbituril of Formula 1 of claim 1 where R<sub>1</sub> is an allyloxy group in a solvent to obtain a solution;  
sequentially adding a porogen and a 0.2-5% by weight of a radical initiator, based on the total weight of reactants, to the solution;

inputting the reaction solution in a column tube with a sealed end and sealing the other end of the column tube;

stirring the reaction solution at 60-80°C for 15-30 hours; and  
washing the column tube.

17. (Original) The monolithic column of claim 16, wherein the monomer is one or more selected from the group consisting of acrylamide, acrylic acid, methacrylic acid, methacrylamide, vinylpyrrolidinone, styrene, methylenebisacrylamide, and methacrylbuteylester.

18. (Original) The monolithic column of claim 16, wherein the porogen is a primary alcohol of C<sub>2</sub>-C<sub>18</sub>, methylenechloride, or chloroform.

19. (Original) The monolithic column of claim 16, wherein the radical initiator is AIBN (2,2'-azobisisobutyronitrile), K<sub>2</sub>S<sub>2</sub>O<sub>8</sub>, ammonium persulfate, or benzoylperoxide.

20. (Original) A monolithic column obtained by a process comprising:

allowing a solution of silane with an alkenyl group of C<sub>3</sub>-C<sub>20</sub> in acetone to flow down through a capillary tube for 10-30 minutes;

sealing both ends of the capillary tube and incubating the capillary tube for 10-30 hours;

washing the inside of the capillary tube with acetone and water;

dissolving a radical initiator, a monomer with a substituted or unsubstituted alkenyl group of C<sub>3</sub>-C<sub>20</sub>, and allyloxycucurbituril of Formula 1 of claim 1 where R<sub>1</sub> is an allyloxy group, in water or a mixed solvent of water and acetone, and adding the reaction solution to the capillary tube;

sealing both the ends of the capillary tube and incubating the capillary tube at room temperature for 10-30 hours for copolymerization; and

washing the capillary tube.

21. (Original) The monolithic column of claim 20, wherein the monomer is one or more selected from the group consisting of acrylamide, acrylic acid, methacrylic acid, methacrylamide, vinylpyrrolidinone, styrene, methylenebisacrylamide, and methacrylbuteylester.
22. (Original) The monolithic column of claim 20, wherein the radical initiator is AIBN, K<sub>2</sub>S<sub>2</sub>O<sub>8</sub>, ammonium persulfate, or benzoylperoxide.
23. (Currently Amended) A stationary phase for column chromatography using the polymer of ~~any one of claims 1 through 14~~ claim 1.